

AMENDMENTS TO THE CLAIMS

Please cancel Claims 29-39 inclusive, as indicated below.

1-14. (Previously cancelled)

15. (previously amended) A composite membrane useful for reverse osmosis or nanofiltration comprising:

a supportive porous under-structure; and

a top layer consisting of a crosslinked polyamide thin film which is adhered to the upper surface of the porous support structure, said top layer having been contacted with a solution of a C₁-C₆ alkyl, alkenyl, haloalkyl, haloalkenyl, or hydroxy sulfonic or disulfonic acid compound,

whereby said membrane has a water flux of at least about 15 gfd and a rejection of at least 20 percent when tested on a 0.05 percent aqueous sodium chloride at 75 psi and 25°C.

16. (previously amended) A composite membrane as in Claim 15 wherein said crosslinked polyamide comprises the reaction product of an aromatic diamine or triamine and an aromatic triacyl halide.

17. (previously amended) A composite membrane as in Claim 16 wherein said crosslinked polyamide comprises the reaction product of an aromatic diamine or triamine, an aromatic triacyl halide and an aromatic diacyl halide.

18. (previously amended) A composite membrane as in Claim 15 wherein the porous support is a polyarylethersulfone.

19. (previously amended) A composite membrane as in Claim 15 wherein said first membrane comprises a thin film, flat sheet, hollow fiber or tubular membrane.

20. (previously amended) A composite membrane as in Claim 15 wherein the membrane is a component of a spiral-wound membrane filter or a plate and frame filter.

21. (previously amended) A composite membrane as in Claim 15 wherein said organic sulfonic or disulfonic acid compound comprises a sulfoacetic, sulfosuccinic, methanesulfonic, ethanedisulfonic, or hydroxybutane sulfonic compound or mixtures thereof.

22. (previously cancelled)

23. (previously amended) A composite membrane as in Claim 15 wherein said organic sulfonic acid compound comprises methanesulfonic acid, trifluoromethanesulfonic acid or a mixture thereof.

24. (previously cancelled)

25. (previously amended) A composite membrane as in Claim 15 wherein said solution of an organic sulfonic acid compound comprises said organic sulfonic acid compound dispersed or dissolved in water, alcohol, glycol, alkoxy alcohol or a carboxylic acid or a mixture thereof.

26. (previously cancelled)

27. (previously presented) A composite membrane as in Claim 15 wherein said organic sulfonic acid compound comprises ethanesulfonic acid.

28. (previously presented) A composite membrane as in Claim 15 wherein said organic sulfonic acid compound comprises trifluoromethanesulfonic acid.

29-39. (cancelled herein)